

Pune, coll. Rajpreet Kaur; Female, 2.iv.2000, Dapodi, Pune, coll. Rajpreet Kaur.

All the mantids were collected when attracted towards fluorescent light.

## ACKNOWLEDGMENTS

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## 26. REDESCRIPTION OF *AMORPHOSCELIS ANNULICORNIS* STAL (INSECTA: MANTODEA) FROM MAHARASHTRA

(With two plates)

Recently, two specimens of a very interesting mantis were collected at Pune, and subsequently two in Tadoba (Chandrapur), Maharashtra State. The mantis was easily placed in the Family Amorphoscelidae because of a set of characteristics as follows: i. short, squarish, tuberculate pronotum (Plate 1, Fig 1). ii. femur and tibia without spines (except a single discoidal spine on femur, Plate 1, Fig. 2) and iii. anal cerci racket-shaped due to expanded distal segment.

In India, there is only one genus under this family, namely, *Amorphoscelis* of which there are only 3 known species (Mukherjee *et al.* 1995). The species *A. annulicornis* Stal was diagnosed by the presence of tubercles on anterior and posterior borders of the pronotum, and the colour pattern of the body. This mantis is supposed to be a common bark dwelling species, occurring in almost all the warmer parts of India. Although there is a report

of the genus *Amorphoscelis* from Andheri, Bombay (Nadkerny 1965), there is no previous record of *A. annulicornis* from Maharashtra (Mukherjee *et al.* 1995), hence this report.

A brief description of the species is given by Mukherjee *et al.* (1995). Some additional taxonomic features and photographs of this mantis are given here, which will help to identify it. Except for one specimen which is dark brown, all the specimens are brown with brownish-black marks on the forewings.

**Redescription:** Head triangular, dark brown with black dots on vertex. Vertex tuberculate with distinct lobulations; lateral lobes cone-shaped, apex of the cone facing posterior side. Frontal sclerite transverse; eyes dorsoventrally flattened, black; antennae thin and longer than body, each segment basally yellowish and apically black; antennal segments increase in length gradually from base to apex and possess a few setae.

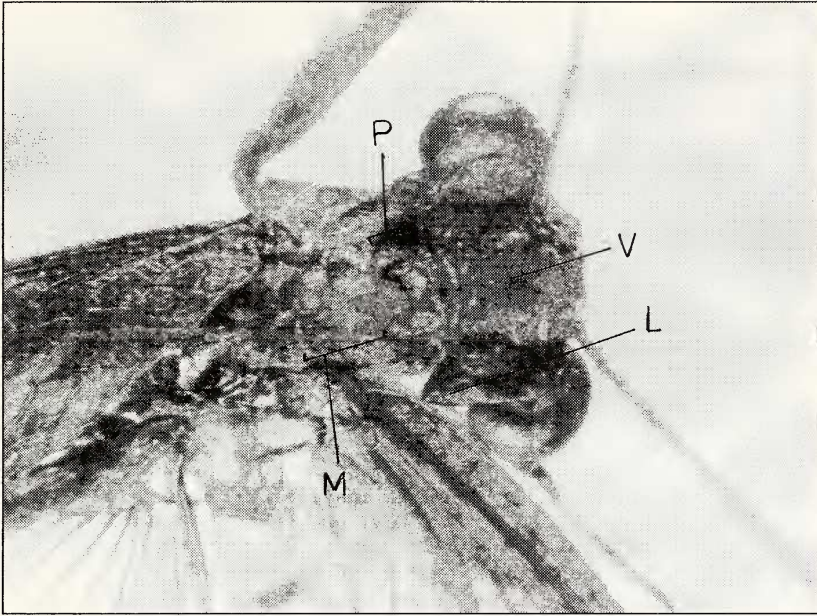


Fig. 1: Head and prothorax

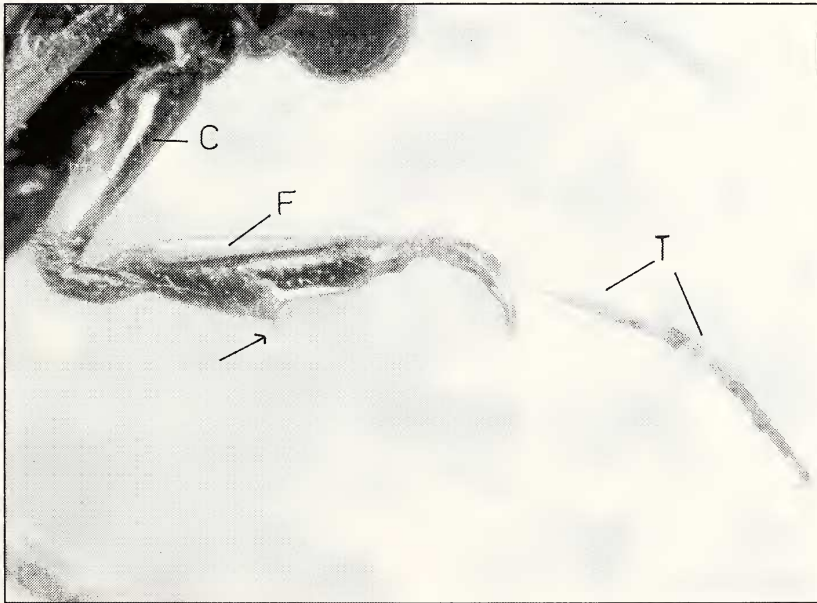


Fig. 2: Foreleg

C: Coxa, F: Femur with single discoidal spine, L: Lateral lobe of vertex, M: Metazona,  
P: Prozona, T: Tarsal segments, V: Vertex

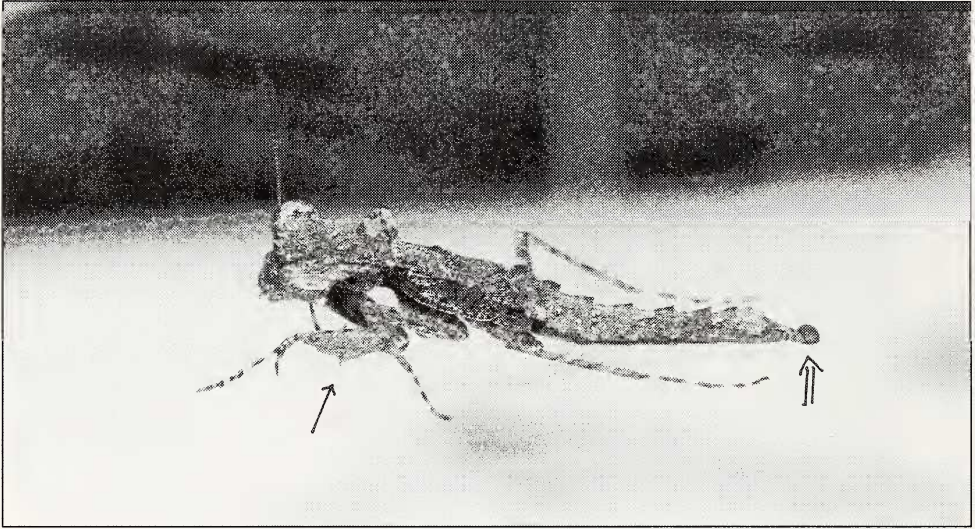


Fig. 3: Lateral view of the nymph, note the characteristic single forefemoral spine (arrow) and racket shaped cerci at the tip of abdomen (double arrow)

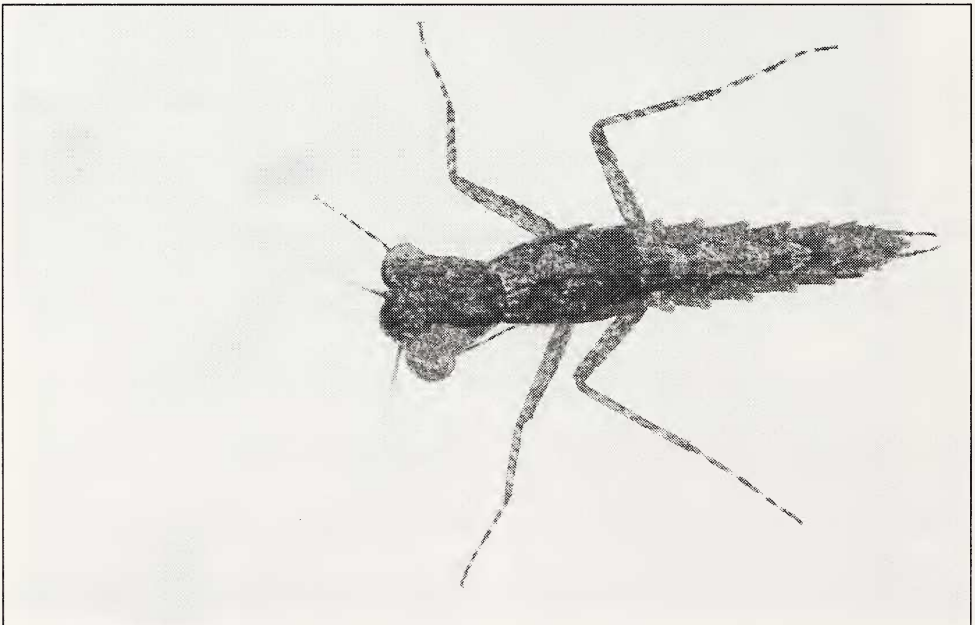


Fig. 4: Dorsal view of nymph, note the peculiar arrangement of abdominal segments and dorsal colour pattern. Also note the annulations on legs and wing buds

MISCELLANEOUS NOTES

TABLE I  
MORPHOMETRY OF *AMORPHOSCELIS ANNULICORNIS*

Sr. No	Total length	Fore wing	Hind wing	Head length	Head breadth	Pronotal length	Coxa	Femur	Tibia	Antenna
1	16.5	14	12	1.7	4.5	1.9	2.5	3	0.6	-
2	16.5	14	13.5	1.4	3.9	1.6	2.5	3	0.6	19
3	17	16.5	15	1.7	3.9	1.7	2.4	3	0.5	22
4	17.5	15.5	14.8	1.8	3.8	1.5	2.4	2.8	0.6	-

All measurements are in millimetres

Pronotum tuberculate; prozona and metazona not clearly demarcated, though with a thin carina on the metazona. Forewings opaque brown with darker spots and patches; hindwings with costal area opaque brown, rest of wing shining transparent, with brownish tinge.

Forelegs short; coxae yellowish-brown, internally basally black; forefemur with characteristic single discoidal spine; conspicuous setae present along the ventral edges of femur; median internal area of the femur (except borders) black; base of the femur also black, which is a variation from the character described by Mukherjee *et al.* (1995); tibiae and tarsal segments setaceous; tibiae yellowish with three black bands or rings, or sometimes (2 specimens) with small black spots without forming rings (again a variation, the earlier description indicates black tibiae with yellow bands). Metatarsus with three black rings or bands; each tarsal segment with basal and apical black band. In case of mid and hindlegs, coxae shining black (variation, as the bases of the coxae have been described as pale); trochanter and femur yellowish-brown, setaceous. Femora and tibiae of mid and hindlegs triangulated because of dark coloured rings.

Abdominal segments dorsally brownish, ventrally shining black and hairy; cerci hairy and racket-shaped due to the enlarged distal segment; total length of cercus in one specimen 2.25 mm, the enlarged last segment 0.85 mm long.

All four examples male, attracted towards fluorescent tubelight, from which they were collected. The locality and other data are as follows:

1. 24.iv.1999, near Vanaz factory (Paud road, Pune), coll. Abhay Soman; 2. 15.ix.1999, Dapodi, Pune, coll. Rajpreet Kaur; 3. 7.xii.1999, Tadoba, Chandrapur, coll. Rahul Marathe; 4. 9.i.2000, Tadoba, Chandrapur, coll. Rahul Marathe.

In addition to adults, we have recently collected one final instar nymph (total length 15 mm) of *A. annulicornis* in Pune, 30.iii.2000, very close to Modern College, coll. J.K. Kadav.

**Morphometry:** Measurements of important body parts of all four specimens are given in Table 1.

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27. NEW RECORDS OF HOLOTHURIANS (ECHINODERMATA: HOLOTHURIA)  
FROM ANDAMAN AND NICOBAR ISLANDS

(With two text-figures)

The Andaman and Nicobar Islands spread out in the Bay of Bengal between 6° 45'-13° 45' N and 92° 15'-94° 15' E, have one of the richest coral reef formations with fringing reefs on the eastern side and barrier reefs on the western side. The present communication deals with new records of holothurians from these islands. The coral reefs of Andaman and Nicobar Islands offer ideal habitats for littoral sea cucumbers and other echinoderms. There have been several reports (Theel 1882, Koehler and Vaney 1908, James 1969, 1983 and Shastry 1998) on the echinoderms from these islands.

During a coral reef survey of the Mahatma Gandhi Marine National Park, Wandoor (South Andaman), by night and day SCUBA diving, interesting species were collected. The holothurians were preserved in 10% formalin, identified with the aid of keys formulated by James (1969) and Kulkarni (1996). For examining spicules, tissues from different parts of the body were cut and dissolved in a concentrated solution of potassium hydroxide. The spicules were then observed under a microscope and drawn to scale.

Two species of holothurians are recorded for the first time from the Islands. The characteristics of these species are given below.

FAMILY: Stichopodidae Hackel, 1896

GENUS: *Thelenota* Clark 1921

*Thelenota ananas* (Jaeger, 1833)

**Material:** Twins Is., 12 m, Rutland Is. 7 m, Boat Is. 9 m depth.

**Description:** Tentacles 20, length 300 to

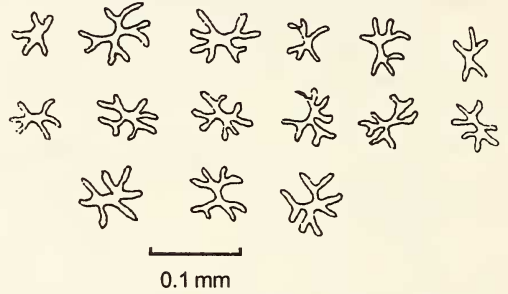


Fig. 1: Spicules of *Thelenota ananas*

425 mm and width ranging from 100 mm to 150 mm. Dorsal and ventral sides well differentiated. Ventral pedicles arranged irregularly. Shape of body sub-rectangular and elongated, characterized with numerous pointed papillae, which are large, conically compressed with their bases united, giving a semistar-like appearance all over the body. Mouth surrounded by 18 to 24 tentacles, papillae. Dorsal papillae double and united at the base to give a star-like appearance. Ventral pedicles arranged irregularly. Live specimens light maroon in colour with an interstitial black zone between the papillae. Spicules (Fig. 1) consist of simple and dichotomously branched rods. Some rods smooth and curved.

**Habitat:** Sandy bottom and coral rubble.

FAMILY: Synaptidae Burmeister, 1837

GENUS: *Euapta* Ostergren, 1898

*Euapta godeffroyi* Semper, 1898

**Material:** Grub Is. 6 m, Jolly Bouys Is. 14 m depth.